

August, 1995

SCAMIT Newsletter

Vol. 14, No.4

NEXT MEETING: Update of Master Species List

GUEST SPEAKER: none

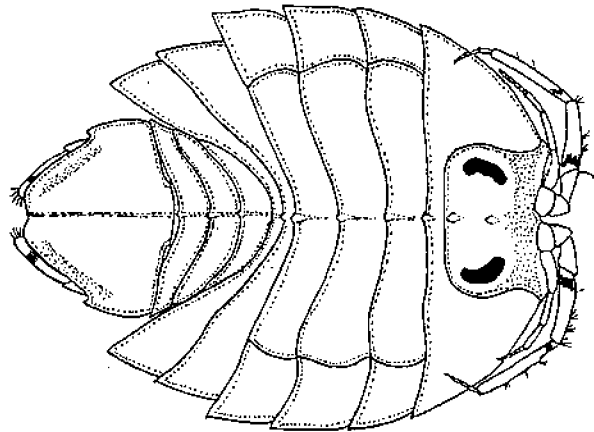
DATE: September 25, 1995

TIME: 9:30am - 3:30pm

LOCATION: SCCWRP
7171 Fenwick Lane
Westminster

SEPTEMBER 25th MEETING

The polychaete staining patterns meeting planned for August and then September will be postponed again until October 16th to allow some members on jury duty and vacations to attend. The meeting on Monday, September 25th will be devoted to additions and emendations to Edition 1 of the SCAMIT Master Species list, many arising from the SCBPP. Members should come prepared with any pertinent changes along with literature to substantiate them. Members with provisionals for addition to the list should bring completed voucher sheets for distribution with the newsletter if they have not yet been circulated.



Serolis carinata
(from Menzies & Barnard 1959)

Those with species list additions which might be controversial (i.e. species not previously reported from the Bight) should bring the specimens on which the record is based for examination during the meeting.

CHRISTMAS PARTY

The yule season is rolling ever closer. Please examine your schedules and consider the following possible dates for the SCAMIT Christmas Party; December 2, 9, and 16. If you have conflicts with other commitments for one or more of these dates, please notify Don Cadien either at a meeting, or at the number listed at the end of the newsletter. We want to select a time when most of the members can participate.

DR THOMAS BOWMAN DIES

We sadly report that Dr. Thomas E. Bowman, who worked productively for decades at the Smithsonian Institution on a variety of crustacean groups, died on 10 August after a prolonged illness. A memorial service was held for him at the Smithsonian on 16 August. Dr. Bowman's distinguished contributions will be sorely missed. He was active in taxonomic pursuits until his death, and had much more to contribute. Obituaries will probably soon be appearing in journals such as *Crustaceana*, the *Journal of Crustacean Biology*, and the *Proceedings of the Biological Society of Washington*. Those seeking more information on Dr. Bowman's life or demise should monitor these sources in the next few months.

NEW LITERATURE

Only one new paper was distributed for examination by the members at the 22 August meeting; a cladistic reexamination of the higher classification of the decapod crustaceans (Scholtz & Richter 1995).

The fourth installment of the Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and the Western Santa Barbara Channel was published 31 August. It is Vol. 12 - Crustacea, Part 3 (Amphipoda). A listing of available volumes, and a schedule of volumes to be released in 1995-96 is attached.

Several other recent papers of possible interest to the membership have been received since the meeting. These concern ultraviolet light impacts on opisthobranch mollusks from shallow marine waters (Carlini & Regan 1995); the spread of the introduced (wanted poster in last newsletter) crab *Carcinus maenas* in central California (Grosholz & Ruiz 1995); and the lack of validity (based on DNA evidence) of a nemertean species strongly separated from its congener by color and color pattern (Sundberg & Andersson 1995).

THE *Heterophoxus oculatus* TYPE

Through the kind offices of Dr. Elizabeth Harrison-Nelson at the Smithsonian we are now able to examine the type of *Heterophoxus oculatus* to verify and extend the original description and facilitate comparison of the taxon with the recent descriptions of *H. conlanae* and *H. ellisi*. Additional material collected concurrently near the type locality was also included, and hopefully will contain males (the holotype is a female). Results of these examinations will be reported in the next newsletter. The holotype will be available for members to examine at the September meeting.

MINUTES OF THE AUGUST 21 MEETING

Those taxonomists that examined the polychaetes for the SCBPP met at SCCWRP to resolve discrepancies amongst the polychaete taxa resulting from the QA/QC reanalysis process. Many of the discrepancies had already been resolved with telephone

conversations and meetings between taxonomists involved with the project. The meeting consisted mainly of members breaking up into small groups and examining specimens for resolution with other taxonomists providing valuable input when needed. All discrepancies amongst the various agencies were resolved at this meeting. It was also decided at this meeting what should be done with the SCBPP data set concerning the malidanids, polynoids, and sigalionids due to inconsistent identifications within these groups by the various agencies. A list of the changes that need to be made to the data follows.

Those malidanids reported as:

Praxillella pacifica
Euclymene grossa newporti
Axiothella rubrocincta
 Euclymeninae

will all change to **Maldanidae**.

Polynoids reported as:

Arctobia anticostiensis
Arctobia cf anticostiensis
Harmothoe sp.
Harmothoe sp. B SCAMIT 1990
Harmothoe cf lunulata
Malmgreniella macginitiei
Harmothoe nigralba (sensu SCAMIT)
Malmgreniella nigralba (sensu Pettibone)
Malmgreniella bansei

will change to **Harmothoinae**. Polynoid IDs other than listed above (including *Harmothoe scriptoria*, *H. sp. A*, and *H. hirsuta*) are believed to be correct and consistent among the four labs involved in the project. However, both Hyperion and CSDLAC reported *H. scriptoria* and *H. sp. A* under the genus *Malmgreniella* and will correct this nomenclatural error in their respective portions of the data.

Sigalionids reported as:

Sthenelais berkeleyi
Sthenelais fusca
Sthenelais tertiaglabra

will change to *Sthenelais sp.* This is do to the inconsistency amongst the four labs in the recognition of small specimens of *Sthenelais*, particularly *S. berkeleyi*. Reports of *Sthenelais verruculosa* are believed to be correct and consistent among the four labs.

Besides being a very productive meeting for resolving SCBPP discrepancy problems the meeting also gave members a chance to realize what particular taxonomic problems need to be addressed in the future by SCAMIT.

MINUTES OF THE AUGUST 22 MEETING

SCBPP animals other than polychaetes were considered during a meeting at SCWRPP on 22 August. The process of resolution was the same as that described above for the polychaete meeting on the 21st of August. Virtually all taxonomic conflicts which were uncovered during the QC process were resolved during the meeting in one fashion or the other. Some more general topics were not addressed, and were deferred until the synoptic data review meeting. Most significant among these was the question of how to deal with identifications of nemerteans. Although we had all suspected that these animals would be a particularly difficult challenge, the problems discovered during the QC were even greater than anticipated.

Other general problems were settled. The nomenclature used for the three species of the bivalve genus *Tellina* which are routinely taken in wastewater monitoring programs in the Bight was stabilized at the meeting. It was not clear which species of the two pigmented forms was intended to bear the name *Tellina*

carpenteri (the original description of Dall is not explicit). Usage between the members had been uneven, with some ascribing the name *T. carpenteri* to the smooth solid pink form, and others using it for the concentrically sculptured form with yellow-orange pigment flanked by radiating white bands. Yet another nomenclatural practice was use of provisional names for both forms.

Usage was standardized for the purposes of the SCBPP to: the pink form being *T. carpenteri*; the yellow-orange+white rayed form being *T. sp A*, and the concentrically sculptured white form being *T. modesta*. All groups had already been using *T. modesta* this way. The allocation of the *T. carpenteri* name was based on the definition of *T. carpenteri* to be adopted in the forthcoming Bivalve Seashells of Western North America.

John Ljubenkov (MEC) pointed out that this usage would render a provisional name unnecessary, since the yellow-orange+white rayed form was the same as described by Hertlein and Grant as *T. arenica*. Subsequent discussion with Paul Scott (SBMNH) indicated that the two forms differ; with *T. arenica* a valid Panamic species, and *T. sp A* still needing a new name. It will be described in the book mentioned above (currently in manuscript).

Mary Bergen (SCCWRP) has determined that identification of sea-cucumbers of the genus *Leptosynapta* to species level is not currently warranted. The taxonomy of the species in our area is too unsettled, and the historic usages too tangled for specific level identifications to be useful. We agreed that for the purposes of SCBPP *Leptosynapta* (like *Chiridota*) would be left at *Leptosynapta sp.* Sewell et al (1995) provide redescription of *Leptosynapta clarki* which may help clarify the situation, but this is too recent to offer assistance in time to affect the SCBPP data.

Doug Diener (MEC) illustrated characteristics of the three species of the isopod genus *Edotia* currently recognized in the Bight. Since few reports of the two provisionals erected by MEC (*Edotia sp A* and *Edotia sp B*) have come from outside his group, it is likely that the two provisionals have not been recognized by most agencies, and that SCBPP data for this genus are thus unreliable. The genus *Edotia* in the northeastern Pacific was recently (Rafi & Laubitz 1990) reviewed. It is not certain that the animal they identified as *E. sublittoralis* from western Canada is the same as that described from southern California by Menzies and Barnard (1959). There are a number of differences in detail between the two forms (as pointed out by Rafi & Laubitz) and the wide geographic separation between the two is suggestive. The lack of intermediate reports may reflect only publishing patterns rather than animal distributions. There is, for instance, a report of *Edotia sublittoralis* from the San Francisco area in the 1983-84 Ocean Outfall Monitoring Program Annual Report for the San Francisco Department of Public Works, Bureau of Water Pollution Control.

Problems in nomenclature in the amphipod genus *Protomedeia* are also suspected. It is unclear whether the *Protomedeia articulata* and *Protomedeia prudens* of Barnard (1962, 1966) are the same as those of Conlan 1983. Given this ambiguity, and the common use of all the above literature in the identification process by some or all of the participating agencies, it was deemed best to not take SCBPP *Protomedeia* identifications to specific level. For the purposes of the SCBPP all *Protomedeia* will be identified as *P. sp.*

Based on the QC reexaminations it was suspected that inconsistencies existed between laboratories in identification of the following genera: *Bittium* (gastropod); *Ophiidermella* (gastropod); and *Gnathia* (isopod). Problems or inconsistencies were also suspected in the taxa pairs *Synidotea media/magnifica* (isopod);

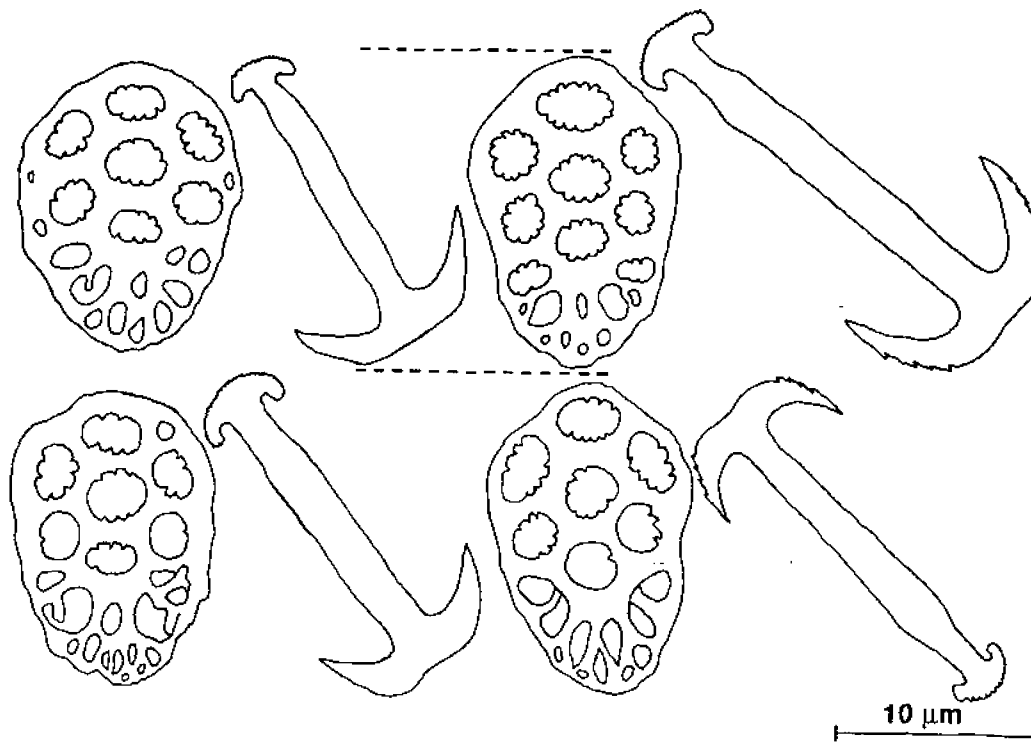
Amphiura acrystata/sp and *Amphioplus hexacanthus/strongyloplax* (ophiuroids); and *Foxiphalus cognatus/obtusidens* (amphipod). These and similar problems as yet unidentified will be addressed during the synoptic review of the submitted SCBPP data. At that point, most of the decisions will be brief, summary, and apply only to the SCBPP. Further consideration of these problems and their broader import can be given during the master species list review in September.

JOB OFFERINGS

Positions as Curatorial Assistant in the Crustacea and Worm Laboratories of the Natural History Museum of Los Angeles County are now open. Call Leslie Harris @ 213)744-3234 for information on the worm position. Applications must be in by 20 September (Crustacea), so act now if interested (see attachment)!

LITERATURE CITED

- BARNARD, J. LAURENS. 1962. Benthic Marine Amphipoda of Southern California: 1. Families Aoridae, Photidae, Ischyroceridae, Corophiidae, Podoceridae. *Pacific Naturalist* 3(1):3-72.
- . 1966. Benthic Amphipoda of Monterey Bay, California. *Proceedings of the United States National Museum* 119(3541):1-41.
- CARLINI, DAVID B., and James D. Regan. 1995. Photolyase activities of *Elysia tuca*, *Bursatella leachii*, and *Haminaea antillarum* (Mollusca: Opisthobranchia). *Journal of Experimental Marine Biology and Ecology* 189(1-2):219-232.
- CONLAN, KATHLEEN E. 1983. The amphipod superfamily Corophioidea in the northeastern Pacific region. 3. Family Isaeidae: systematics and distributional ecology. *National Museums of Canada Publications in Natural Sciences* (4):1-75.
- GROSHOLZ, E. D., and G. M. Ruiz. 1995. Spread and potential impact of the recently introduced European green crab, *Carcinus maenas*, in central California. *Marine Biology* 122(2):239-247.
- MENZIES, ROBERT JAMES, and J. Laurens Barnard. 1959. Marine Isopoda on coastal shelf bottoms of southern California: systematics and ecology. *Pacific Naturalist* 1(11/12):3-35.
- RAFI, F., and Diana R. Laubitz. 1990. The Idoteidae (Crustacea: Isopoda: Valvifera) of the shallow waters of the northeastern North Pacific Ocean. *Canadian Journal of Zoology* 68:2649-2687.
- SCHOLTZ, GERHARD, and Stefan Richter. 1995. Phylogenetic systematics of the reptantian Decapoda (Crustacea, Malacostraca). *Zoological Journal of the Linnean Society* 113(3):289-328.
- SEWELL, MARY A., Ahmed S. Thandar, and Fu-Shiang Chia. 1995. A redescription of *Leptosynapta clarki* Heding (Echinodermata: Holothuroidea) from the northeast Pacific, with notes on changes in spicule form and size with age. *Canadian Journal of Zoology - Revue Canadienne de Zoologie* 73(3):469-485.
- SUNDBERG, PER, and Susanne Andersson. 1995. Random amplified polymorphic DNA (RAPD) and intraspecific variation in *Oerstedtia dorsalis* (Hoplonemertea, Nemertea). *Journal of the Marine Biological Association of the United Kingdom* 75(2):483-490.



Variations in anchor and anchor plate spicules in *Leptosynapta clarki* (from Sewell et al 1995)

SCAMIT OFFICERS:

If you need any other information concerning SCAMIT please feel free to contact any of the officers.

President	Ron Velarde	(619)692-4903
Vice-President	Don Cadien	(310)830-2400 ext. 403
Secretary	Cheryl Brantley	(310)830-2400 ext. 403
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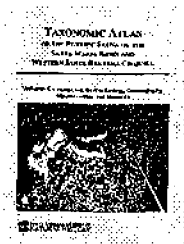
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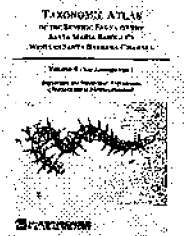
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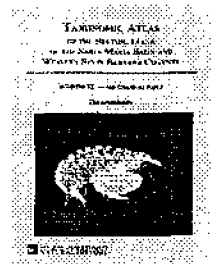
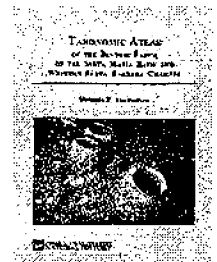
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For further information contact:

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James Blake, Science Applications International Corp.
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